

REMARKS/ARGUMENTS

Claims 89 – 120 are currently pending in this application. Claims 1 – 88 were previously canceled without prejudice. Claims 95, 103, and 108 are amended.

Claim Objections

The Examiner objected to claim 95 because the claim was written in improper dependent form. Claim 95 is amended to correct this error. The withdrawal of the objection to the claims 95 is respectfully requested.

The Examiner objected to claim 103 because the claim included improper antecedent basis. Claim 103 is amended to correct this error. The withdrawal of the objection to claim 103 is respectfully requested.

Claim Rejections - 35 U.S.C. § 103

Claims 89 – 94, 96 – 101, 103 – 116, and 118 – 119 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Publication No. 2004/0142691 to Jollota et al. (hereinafter “Jollota”) in view of U.S. Patent No 6,330,459 to Crichton et al. (hereinafter “Crichton”).

Claim 117 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Jollota in view of Crichton and in further view of U.S. Patent No 6,593,880 to Velazquez et al. (hereinafter “Velazquez”).

Claims 95, 102, and 120 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Jollota in view of Crichton and in further view of U.S. Patent No 5,396,541 to Anderson et al. (hereinafter “Anderson”).

Jollota does not disclose detecting an omnidirectional sounding pulse from a wireless transmit/receive unit (WTRU) as is recited in independent claims 89, 96, 103, 108, and 114. Jollata teaches the use of a Bluetooth Inquiry packet. One skilled in the art would recognize that a Bluetooth INQUIRY packet is inapplicable for use with a WTRU and is not the equivalent of an omnidirectional sounding pulse. For example, the INQUIRY process is relatively slow, on the order of several seconds to complete; the effective signal range is only 10 meters; and an INQUIRY signal is sent on a train of 32 hop frequencies. Furthermore, an INQUIRY signal results in the communication of a target Bluetooth access point's MAC address and clock information. Because relative location is irrelevant in the Bluetooth environment, a Bluetooth INQUIRY packet does not provide any indication of relative location. Therefore an inquiry signal is not equivalent to the omnidirectional sounding pulse recited in claims 89, 96, 103, 108, and 114.

Jollota does not disclose detecting an omnidirectional sounding pulse from a wireless transmit/receive unit (WTRU) that is conducting the wireless communication via another network station as is recited in independent claims 89, 96, 103, 108, and 114. Jollata teaches that the PSC determines the ‘optimal BSU’

based in part on the number of available handoff channels, (paragraph [0025]). In particular, “even if a BSU has some radio capacity, handoff-support is better assured if these handoff channels are left idle.” Paragraph [0025]. Furthermore, Jollota teaches that the method disclosed is initiated when the MU enters the PCN or powers on, (paragraph [0021]). Thus, if the MU is either just powering on, or just entering the PCN, it cannot be conducting wireless communication via another network station as is recited in independent claims 89, 96, 103, 108, and 114.

Moreover, the Examiner admits that Jollata does not disclose “the network station configured to receive from the interface a relative location of the WTRU and selectively operating the beamforming antenna to direct a common channel toward the relative location of the WTRU.” As such the Examiner has cited Crichton.

Crichton does not disclose receiving from the interface a relative location of the WTRU as is recited in independent claims 89, 96, 103, 108, and 114. Crichton teaches that the direction of the communication device is determined by the base station based on the direction of arrival of the signal at the antenna of the base station, (column 5, line 55 – column 6, line 5). Furthermore, Crichton teaches methods for optimizing the radiation pattern, performed by the mobile unit (column 6 lines 25 – 51), and performed by the base station (column 6, line 52 – column 7, line 52). Nothing in Crichton teaches, suggests, or implies that the base station ever receives a relative location of a WTRU from an interface. Crichton, and similarly

Jollota, teaches the use of signal strength for selecting a base station to communicate with the mobile station, (column 5, line 65 – column 6, line 5).

Furthermore, Crichton does not disclose receiving from the interface a relative location of the WTRU and a notification to continue the wireless communication with the WTRU as part of a handover as is recited in independent claims 89, 96, 103, 108, and 114. Crichton teaches that a request for access/service is performed upon powering-up or transitioning a coverage area boundary, (column 5, lines 35 – 38). Thus, if the communications unit is sending a request for access/service when it is either just powering-up, or just entering the coverage area, it is not conducting wireless communication via another network station as is recited in independent claims 89, 96, 103, 108, and 114.

Similarly, Velazquez fails to teach, suggest, or imply the elements recited in independent claims 89, 96, 103, 108, and 114.

Crichton, Velazquez, and Anderson, taken alone or in combination, do not remedy the deficiencies of Jollota. Therefore claims 89, 96, 103, 108, and 114 are distinguishable over the combination of Jollota, Crichton, Velazquez, and Anderson.

Claims 90 – 95, 97 – 102, 104 – 107, 109 – 113, and 115 – 120 depend from claims 89, 96, 103, 108, and 114 respectively, and the Applicants believe these claims are allowable over Jollota, Crichton, Velazquez, and Anderson for at least the reasons provided above.

Applicant: Cave et al.
Application No.: 10/667,633

Based on the arguments presented above, withdrawal of the 35 U.S.C. § 103(a) rejection of claim 89 – 120 is respectfully requested.

Conclusion

If the Examiner believes that any additional minor formal matters need to be addressed in order to place this application in condition for allowance, or that a telephonic interview will help to materially advance the prosecution of this application, the Examiner is invited to contact the undersigned by telephone at the Examiner's convenience.

In view of the foregoing amendment and remarks, Applicants respectfully submit that the present application is in condition for allowance and a notice to that effect is respectfully requested.

Respectfully submitted,

Cave et al.

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